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Le but de cette étude était d'évaluer le développement des habiletés de communication en français d'élèves inscrits à différents cours de français langue seconde au programme de post-immersion de la CEPGM. Six groupes de 9e et 10e années ont participé à cette étude. Tous les élèves avaient suivi auparavant un programme d'immersion tardive d'un an en secondaire I. Les résultats nous amènent à conclure que les quatre cours de français langue seconde favorisent le développement des habiletés de communication en français et que la performance des élèves reflète, dans une certaine mesure, les différents niveaux de difficulté de ces cours.

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THE RELATIONSHIP BETWEEN COURSE LEVEL AND STUDENT ACHIEVEMENT IN A SECOND LANGUAGE: AN EXAMPLE FROM FRENCH IMMERSION

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Résumé

Le but de cette étude était d'évaluer le développement de la compétence linguistique en français d'élèves inscrits à différents cours de français langue seconde au programme de post-immersion. Six groupes d'élèves de 9ème et 10ème années ont participé à cette étude: trois groupes d'élèves en French 532, un groupe d'élèves en French 522, un groupe d'élèves en French 432 et un groupe d'élèves en French 422. Tous les élèves avaient suivi auparavant un programme d'immersion tardive d'un an (secondaire I). Un groupe témoin français a été inclus pour fins de comparaison.

La compétence linguistique en français des élèves a été évaluée à l'aide des tests suivants: un test de lecture cloze contenant deux sous-tests et un test de composition. Le test de composition a été mesuré selon une évaluation globale de cinq savoir-faire: l'expression des idées, la communication, la grammaire, le vocabulaire et l'orthographe, et selon une analyse linguistique objective. Chaque test a été administré deux fois, une fois au début de l'année scolaire (pré-test) et une fois à la fin de l'année scolaire (post-test).

Les résultats indiquent que: (1) il n'y avait pas de différence significative entre les trois groupes d'élèves en French 532, en conséquence ces trois groupes ont été considérés par la

suite comme un seul groupe; (2) pour tous les groupes il y a eu une amélioration significative entre les résultats du pré-test et ceux du post-test sur l'évaluation globale du test de composition ainsi que sur le test de lecture cloze; (3) les groupes d'élèves se classent dans l'ordre décroissant suivant: French 532, French 522, French 432 et French 422. Les différences entre ces quatre groupes d'élèves n'étaient pas toujours significatives, cependant on a constaté que: (a) le groupe d'élèves en French 532 a obtenu des résultats nettement supérieurs à ceux des trois autres groupes d'élèves sur le test de lecture cloze; (b) le groupe d'élèves en French 422 a obtenu des résultats nettement inférieurs à ceux des autres groupes sur l'évaluation globale de la composition; (c) les résultats des élèves du groupe témoin francophone étaient nettement supérieurs à ceux des quatre groupes d'élèves anglophones en ce qui concerne le test de lecture cloze et trois des savoir-faire du test de composition (grammaire, vocabulaire et orthographe).

Les résultats de cette étude nous mènent à conclure que les quatre cours de français langue seconde favorisent le développement de la compétence linguistique de l'élève et que la performance des élèves réflète, dans une certaine mesure, les différents niveaux de difficulté de ces cours.

Summary

The purpose of this study was to assess the development of French proficiency of students taking different French Language Arts courses at the post-immersion level. Six groups of students from grades 9 and 10 who had previously attended a one-year late immersion program participated in this study: three French 532 groups, one French 522 group, one French 432 group and one French 422 group. A French control group was included for comparison purposes.

The students' linguistic proficiency in French was measured by the following tests: a "test de lecture cloze" which had two subtests and a "test de composition". The test de composition was assessed by means of global ratings of five variables: content, communication, grammar, vocabulary and spelling and by means of a linguistic analysis. Each test was administered twice, once at the beginning of the school year and once at the end of that same school year.

The results indicate that: (1) there were no significant differences among the three French 532 groups and these groups were, therefore, considered as one group in subsequent analyses; (2) for all the groups there was significant improvement between the pre-test

and post-test scores of the test de lecture cloze and on the global ratings of the composition; (3) the groups ranked in descending order as follows: French 532, French 522, French 432 and French 422. Significant between-group differences were as follows: (a) the French 532 group scored significantly higher than the other three groups on most evaluation measures of the test de lecture cloze; (b) the French 422 group scored significantly lower than the other groups on most evaluation measures of the test de composition; (c) the French control group scored significantly higher than the four anglophone groups on the test de lecture cloze and on three variables (grammar, vocabulary and spelling) of the test de composition.

The results of this study lead to the conclusion that all four Language Arts courses promote an increase in French proficiency and that the different levels of difficulty of these courses are reflected, to some extent, in the linguistic performance of the students.

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The purpose of this study was to assess the development of French proficiency of students taking different French Language Arts courses as part of their post-immersion program. All the students who participated in the study had attended a one-year late immersion program in grade 7 and had taken post-immersion courses in subsequent years.

Previous evaluations of the one-year late immersion program had consistently shown that students enrolled in this program attained a lower level of French proficiency than students who had attended early immersion or two-year late (Cycle I) immersion programs (Adiv and Morcos, Note 1, Adiv and Walsh, Note 2, Genesee & Leblanc, Note 3, Genesee & Morcos, Note 4). Interestingly, the reports also noted that there were fewer significant differences between the one-year late immersion students and students from the more intensive immersion programs (early and two-year late immersion) on production tasks (i.e., speaking and writing) than on comprehension tasks (i.e., listening and reading). Both Adiv (Note 5) and Genesee (Note 6) have noted that the French Language Arts courses may bear little systematic relation to the students' actual competence in the daily usage of the language. Adiv and Walsh (Note 2) have also suggested that these courses may not provide sufficiently differentiated levels of language instruction to

stimulate maximal linguistic development for each type of immersion program.

Closer investigation of the curriculum of the immersion programs reveals that different Language Arts courses are often offered simultaneously within each program. This factor seems to be particularly salient in grades 9 and 10 of the one-year late immersion program. Here several French Language Arts courses, all of them designated as "French second language" courses are offered at each grade level allowing students to be "streamed" according to their level of French proficiency. The question then arises as to whether all of these courses do in fact represent different levels of linguistic difficulty and whether each course promotes significant increases in French proficiency. This study was designed to examine these issues.

Course Description

The four French Language Arts courses discussed in this study are all specifically designed for French second language learners. In the regular core program (one period of French a day), these courses are given in grades 10 and 11 (Secondary IV and V). At each level, there is a course for more advanced students (French 432 in grade 10 and French 532 in grade 11) and a course for the regular

students (French 422 in grade 10 and French 522 in grade 11). When these courses are used in post-immersion programs, they are offered at a lower grade level. Thus, students who have attended a one-year late immersion program take either French 432 or French 422 in grade 9 (Secondary III) and either French 532 or French 522 in grade 10 (Secondary IV). Students who have attended a more intensive immersion program (early immersion or two-year late immersion) take these courses even earlier, i.e. in grade 8 (Secondary II) and in grade 9 (Secondary III) respectively. Moreover, this year, French 532 which is the most advanced of the four courses has been given on an experimental basis to a group of very advanced grade 9 students from the one-year late immersion program.

Method

The Samples

Six groups of students who had previously attended a one-year late immersion program participated in this study: three French 532 groups and one group of each of the following courses: French 522, French 432 and French 422. Two of the French 532 groups were grade 10 students and the other group was a grade 9 group. The French 522 group was a grade 10 group and the French 432 and 422 groups were basically grade 9 groups. A group of grade 10

native French students attending a regular French school was included for comparison purposes. A summary of the actual sample sizes is presented in Table 1 A and a list of the schools from which these samples were selected is presented in Table 1 B.

In order to assess the equivalence of the groups in terms of mental ability, all the students were administered the Raven's Standard Progressive Matrices test. This is a non-verbal test and is, therefore, particularly suitable for testing subjects who speak different native tongues.

The Test Battery

The following French language tests were administered: 1) a "test de lecture cloze" and 2) a "test de composition". Each test is described briefly below.

(1) Test de lecture cloze

The "test de lecture cloze" or cloze test has been used extensively as a measurement of overall proficiency in second language achievement (Aitken, 1977; Oller, 1973). The most common version consists of a passage from which every n^{th} word has been deleted. The student must complete the passage by supplying replacements for the deleted words. The deleted words include various parts of speech and, therefore, the learner has to use grammatical as well as

contextual clues in order to supply the missing items. The cloze test used in the present study consisted of two sub-tests. In sub-test I, which was developed by the Ontario Institute for Studies in Education (O.I.S.E.), the students were asked to read a 412-word passage entitled "Le Canada vu par un Français". In order to introduce the student to the story, the two opening sentences of the passage were left intact and every seventh word thereafter was deleted. The passage contains a total of 41 deletions. Sub-test II was developed by the Research department of the P.S.B.G.M. It was designed to assess the students' grammatical skills in French. Therefore, the words were not deleted randomly but rather on basis of their grammatical function. The sub-test consists of a 272-word passage taken from a magazine article and is entitled "Seule dans le désert". The passage contains a total of 30 deletions.

The test was scored in two different ways: exact word replacements and contextually acceptable replacements. In the latter case, spelling mistakes were not considered. The evaluation of the contextually acceptable replacements was based on the independent judgment of two native French-speaking judges. The judges' ratings were combined to form a single score for each student.

(2) Test de composition

The students were asked to write a composition based on one of five topics. No limit was imposed regarding the length of the composition. However, the students had to complete the task within a 50-minute period. The compositions were assessed in two ways: by means of global ratings and by means of a linguistic analysis.

For the global ratings, five aspects of performance were considered: (1) content, (2) communication, (3) grammar, (4) vocabulary and (5) spelling. A five-point rating scale was established ranging from 5 (superior) to 1 (very poor). Each one of the above variables were evaluated independently by two native French raters. For each variable, the ratings of both judges were combined to form a single score. This procedure was used for each composition and mean scores were then calculated for the individual groups.

A sub-sample of the compositions (for sample sizes see Table 1 A) was subsequently analyzed using several measures based on Hunt's (1970) T-unit . A T-unit has been defined as "a main clause plus all subordinate clauses and non-clausal structures attached to or embedded in it" (Hunt, 1970:4). The T-unit has been suggested as a measure of syntactic complexity in second language development (Larsen - Freeman and Strom, 1977) and has been used to assess oral and written

speech samples of second language learners (Larsen - Freeman, 1978; Scott and Tucker, 1974). In the present study, four quantitative measures were used to evaluate the students' compositions: (1) the total number of T-units produced, (2) the mean length of a T-unit, (3) the number of correct T-units produced and (4) the mean length of a correct T-unit . In the assessment of the correct T-units , spelling errors and grammatical distinctions which are not perceptible in oral expression were excluded from consideration.

Testing procedures

All the tests were administered twice to the same students, once at the beginning of the school year (October 1980) and once at the end of the school year (April 1981). The tests were group administered to intact classes of the respective Language Arts courses. No distinction was made between grade 9 and 10 students, since students in post-immersion Language Arts courses are often grouped according to level of French proficiency and not according to grade level. Results of students with French-speaking parents were excluded from the data analysis. Each test was administered during a 50 minute period and the two tests were never given on the same day. The French control group could only be pre-tested in November. These students were not

retested in April since it was felt that there would be no substantial changes in the linguistic competence of native speakers over so short a period.

Results

The students' scores on the Raven's Standard Progressive Matrices test were analyzed first using an analysis of variance procedure. The results of this analysis revealed that there were statistically significant differences among the groups (Table 2). Since these differences could influence the results of the French language tests and thus confound the effect of the different Language Arts courses, all French language tests were analyzed using an analysis of covariance procedure. The test scores of the three French 532 groups were compared first using a one-way analysis of covariance procedure. The results of this analysis revealed no significant differences among the three groups (Table 3) and the test scores of these three groups were therefore collapsed in subsequent analyses. For these analyses, two statistical procedures were used. First, in order to assess the progress made by each post-immersion group during the school year, a two-way analysis of covariance with repeated measures was performed. Here, the pre- and post-test scores obtained for each group were used.

Second, a one-way analysis of covariance was performed to compare the post-test scores of each group to those of the French control group. Wherever the statistical analyses revealed significant between-group differences, Tukey's procedure of post-hoc multiple comparisons was used to determine which groups differed significantly from one another. All the test scores and the results of the statistical analyses are summarized in Tables 4, 5, 6 and 7. For each test, the mean scores shown in the tables represent mean scores adjusted for group differences on the Raven's Standard Progressive Matrices test scores. To simplify data presentation, two formats have been used to represent between-group comparisons. When there are fewer significant differences than insignificant differences, the significant ones have been indicated by a solid line in the tables; where there are fewer insignificant differences, these have been indicated by a broken line. The results of the analyses will be discussed below. The results of the comparison between the pre- and post-test scores will be presented first (see Tables 4 and 5) followed by the comparison with the French controls (see Tables 6 and 7).

Comparison of Pre- and Post-Test Results

(1) Test de lecture Cloze

The results for the exact word replacements on the test de lecture cloze (total score) reveal a significant improvement in performance between pre- and post-test scores ($F = 42.75$, $p < .001$) as well as significant between group differences ($F = 12.28$, $p < .001$). The French 532 group (pre-test $\bar{X} = 32.80$; post-test $\bar{X} = 36.13$) scored significantly higher than the three other groups (French 522, pre-test $\bar{X} = 25.06$, post-test $\bar{X} = 30.19$; French 432, pre-test $\bar{X} = 23.39$, post-test $\bar{X} = 28.02$; French 422 pre-test $\bar{X} = 23.30$; post-test $\bar{X} = 24.75$).

The results of sub-test I of the test de lecture cloze indicate a similar overall pattern of development, i.e., there were significant differences between pre- and post-test scores ($F = 54.23$, $p < .001$) as well as significant between-group differences ($F = 11.88$, $p < .001$). However, there was also a significant group x test interaction ($F = 2.86$, $p < .05$). Further analysis revealed that improvement in performance was only significant for three of the four groups (French 532, French 522 and French 432). Furthermore, on the pre-test, the French 532 group ($\bar{X} = 13.59$) scored significantly higher than the three other groups (French 522, $\bar{X} = 8.62$; French 432, $\bar{X} = 8.30$; French 422, $\bar{X} = 7.80$). On the post-Test, the French 532 group ($\bar{X} = 15.18$) still scored significantly higher than the French 432 group ($\bar{X} = 11.20$) and the French 422 group ($\bar{X} = 9.03$). However, there were no significant differences between the French 532

group and the French 522 group ($\bar{X}$ =12.15).

On sub-test II of the test de lecture cloze, there was again significant improvement between pre- and post-test scores ($F = 10.47$, $p < .01$) and there were also significant between group differences ($F = 10.05$, $p < .001$). The French 532 group (pre-test $\bar{X} = 19.21$, post-test $\bar{X} = 20.95$) scored consistently higher than the French 432 group (pre-test $\bar{X} = 15.10$, post-test $\bar{X} = 16.83$) and the French 422 group (pre-test $\bar{X} = 15.67$, post-test $\bar{X} = 15.72$). There were no significant differences on this sub-test between the French 532 group and the French 522 group (pre-test $\bar{X} = 16.44$, post-test $\bar{X} = 18.04$). Since there was no interaction here, these findings apply equally to the pre-test and to the post-test results.

The results of the contextually acceptable replacements of the test de lecture cloze (total score as well as sub-tests I and II) show a pattern similarto that of the exact word replacements. However, here no interaction was noted on sub-test I so that the performance of all groups improved from the pre-test period to the post-test period. As expected, scores were always higher than when the exact word scoring method was used (for details see Table 4) and in decreasing order, the ranks for the four groupswere French 532, French 522, French 432 and French 422.

(2) Test de composition

As explained above,the compositions were evaluated in two ways:

(1) a global evaluation and (2) a linguistic analysis .

The results of the global evaluation reveal a significant improvement in performance between the pre-test and post-test ratings on all five variables (content, $F = 17.36$, $p < .001$; communication, $F = 156.68$, $p < .001$; grammar, $F = 104$, $p < .001$; vocabulary, $F = 58.30$, $p < .001$; spelling, $F = 48.14$, $p < .001$. Between the groups, the results showed only few significant differences. The French 422 group was rated significantly lower than the French 432 group on three variables: communication, grammar and vocabulary. The French 422 group was also rated significantly lower than the French 532 group on content and vocabulary. Finally, the French 422 group was rated lower than the French 522 group on content. (For details of the numerical values of the ratings see Table 5) Thus, the French 422 group was rated significantly lower than the other three groups on a number of variables, whereas there were no significant differences between the French 532 group, the French 522 group and the French 432 group on any of the variables. It should, however, be noted that on the communication variable there was a moderately significant test x group interaction ($F = 2.96$, $p < .05$).

The results of the linguistic analysis show significant differences between pre- and post-test scores for the total number of T-units produced ($F = 6.75$, $p < .05$) and for the number of correct T-units ($F = 6.28$, $p < .05$). Closer examination revealed that for each group the total number of T-units and the correct number of T-units decreased between the pre-

test and the post-test. Thus, the students wrote shorter compositions and produced fewer correct T-units at Time II than at Time I. The informal comparison of the ratio between the total number of T-units and the number of correct T-units (not shown on the Tables) indicates, however, that the proportion of correct T-units remained stable from Time I to Time II.

The linguistic analysis reveals no significant between-group differences except in the case of the number of words per correct T-unit. Even here the level of significance ($F = 2.96$, $p < .05$) was too low for further between-group analysis.

Comparison of Post-Test Results with French Controls

1) Test de lecture cloze

The results for the exact word replacements on the test de lecture cloze (total score) indicate that the French controls ($\bar{X} = 44.64$) scored significantly higher than all the other groups. The French 532 group ($\bar{X} = 35.27$) scored significantly higher than the French 432 group ($\bar{X} = 27.18$) and the French 422 group ($\bar{X} = 24.64$). There were no significant differences between the French 532 group and the French 522 group ($\bar{X} = 29.76$).

A similar pattern is revealed for sub-test I and sub-test II of the test de lecture cloze (for details see Table 6).

This significant difference in performance between the French control group and the four other groups is maintained when the contextually

acceptable replacement are considered. However, here the French 532 group also scored significantly higher than the French 522 group on the total score. All other group differences were similar to those noted for the exact word replacements (for details see Table 6).

2) Test de composition

The results of the global ratings of the test de composition indicate that for content and communication the French control group (content $\bar{X} = 4.10$, communication $\bar{X} = 3.97$) was rated significantly higher than the French 422 group (content $\bar{X} = 3.46$, communication $\bar{X} = 3.47$), whereas there were no significant differences on these two variables between the French controls, the French 532 group (content $\bar{X} = 4.06$ communication $\bar{X} = 3.89$) the French 522 group (content $\bar{X} = 3.93$, communication $\bar{X} = 3.93$) and the French 432 group (content $\bar{X} = 3.87$, communication $\bar{X} = 3.89$). On the other hand, there were significant differences between the French controls and all four anglophone groups on grammar, vocabulary and spelling. On these three variables the French controls were rated consistently above 4 (grammar $\bar{X} = 4.26$; vocabulary $\bar{X} = 4.13$ and spelling $\bar{X} = 4.04$), whereas the other groups were rated between 2.5 and 3.7 (for details see Table 7).

The results of the linguistic analysis show no significant differences between the French controls and the four other groups except

in the number of words per correct T-unit ($F = 2.82$, $p < .05$) where the French controls ($\bar{X} = 11.23$) scored significantly higher than the French 432 group ($\bar{X} = 6.86$) and the French 422 group ($\bar{X} = 5.98$).

Summary and Discussion

The results of this study can be summarized as follows:

(1) For all the groups there was significant improvement in performance between the pre-and post-test results on all measures of evaluation except the linguistic analysis. Here the results reveal that the students wrote significantly shorter compositions on the post-test than on the pre-test.

(2) There were no significant differences among the three French 532 groups and these three groups were collapsed into one group.

(3) On the "test de lecture cloze" the French 532 group ranked consistently higher than all the three other groups except on sub-test II where there were no significant differences between the French 532 group and the French 522 group.

(4) On the "test de composition" the French 422 group was rated significantly lower than the French 532 group on content and vocabulary. The French 422 group was also rated lower than the French 432 group on communication, grammar and vocabulary. Finally, the French 422 group was rated significantly lower than the French 522 group on content. There were no other significant between-group differences on the global ratings on this test and there was only one marginally significant difference among the four groups on the T-unit analysis.

(5) The French control group scored significantly higher than the four anglophone groups on the test de lecture cloze and on three variables (grammar, vocabulary and spelling) of the test de composition. The French control group also produced significantly longer correct T-units than the French 432 group and the French 422 group.

(6) There were no significant differences between the French control group, the French 532 group and the French 522 group on the composition in terms of length, content and communication skills.

The major pattern that emerges from these results is that the four Language Arts groups can be ranked in descending order as follows: French 532, French 522, French 432 and French 422. However, significant between-group differences were not consistent.

The finding that the French 532 group scored significantly higher than the other groups on the test de lecture cloze seems to indicate that the students in this group had attained a higher level of overall proficiency in French since in this test both receptive and productive skills are called into operation. On the other hand, between-group differences are less pronounced, particularly between the French 532 group and the other groups, when the results of the composition are considered. Several factors may help explain these differences between the results of the test de lecture cloze and those of the test de composition. First, aside from understanding the title, the writing of a composition does not involve comprehension. Thus, although compositions are considered a good overall

measure of proficiency, they do not tap the learner's ability to react to information presented in the second language. Furthermore, in writing a composition the learner can control, to some extent, the grammatical structures and the vocabulary he or she wants to use. Thus, syntactic complexities may be avoided and paraphrases can be substituted for specific lexical items which the learner has not fully acquired. Such strategies operate of course in any production task. However, they may be accentuated in assignments which require little interaction with second language input and which are not under the pressure of a time factor, as is the case in oral production.

If the results of the composition are taken as an indication of the students'actual ability to express themselves in French and not as an overall measure of French competence, they seem to indicate that the three groups: French 532, French 522 and French 432 are equally proficient in French. By comparison, the French 422 group seems to be weaker, not only in linguistic skills such as grammar and vocabulary, but also in the more communicative based skills.

The distinction between communicative skills and linguistic skills is further accentuated when the composition results of the four anglophone groups are compared to those of the French control group. Here the results reveal that the French 532, French 522 and French 432 groups did not differ significantly from those of the native speakers in terms of communicative skills. However, the performance of the francophone group on linguistic

skills (grammar, vocabulary and spelling) was distinctly superior to that of the other groups. These findings support previously noted characteristics of French language development in immersion programs, namely that the development of communicative skills in these programs is far superior to that of linguistic skills (Adiv, Notes 5 and 7; Adiv and Walsh, Note 2).

It is noteworthy that the French control group produced significantly longer correct T-units than the four anglophone groups, whereas there were no significant differences in T-unit length between the native speakers and the second language learners when grammatical and lexical appropriateness were not considered. Moreover, in terms of total number of T-units, the French control group produced the shortest compositions. However, the between-group differences are statistically not significant here and may merely reflect the anglophones eagerness to demonstrate their ability to express themselves in French. What is more difficult to explain is the trend of all the anglophone groups to produce shorter compositions at the post-test period than at the pre-test period. It is possible that motivational factors rather than language proficiency are influencing performance here. The end of the school year is generally an exam period which imposes considerable pressure upon students. Although the post-tests were administered prior to the exam period, the students'attitude towards tests which they knew would not affect their grades may have been less serious at a time close to the exam period than at the beginning of the shool year when such pressures were not yet operative.

Finally it is of interest to note that there were no significant differences between the grade 9 students and the grade 10 students in French 532. These findings suggest that the course material is appropriate for the lower grade level and that course 532 should possibly be offered on a larger scale to advanced one-year late immersion students.

Two major conclusions can be drawn from the findings of this study. First, the students in all four Language Arts courses do increase their level of French proficiency over the course of a year. Second, the numerical rank order of the four groups according to the test results reflects the relative degree of difficulty of the respective Language Arts courses. However, the absence of consistent statistically significant differences between the groups suggests that differences in the level of difficulty of the various courses may not be as pronounced as is generally assumed.

In accepting these conclusions it should be borne in mind that the findings of this study are based on a limited sample of students. It must also be remembered that the tests used in this study are not meant to measure the students' knowledge of specific grammatical and lexical items on which the four courses may differ, but rather their ability to incorporate such new knowledge into their overall linguistic competence. Further testing along these lines seems advisable since findings of studies such as the present one may have important implications for the design of the French Language Arts courses.

Reference notes

1. Adiv, E. and Marcos, C. A comparison of three alternative French immersion programs at the grade 9 level. Instructional Services Department, The Protestant School Board of Greater Montreal, November, 1979.

2. Adiv, E. and Walsh, S. A comparison of alternative French immersion programs: grades 10 and 11. Instructional Services Department, The Protestant School Board of Greater Montreal, October, 1980.

3. Genesee, F. and Leblanc, M. A comparative evaluation of three alternative French immersion programs: grades 7 and 8. Instructional Services Department The Protestant School Board of Greater Montreal, January, 1978.

4. Genesee, F. and Marcos, C. A comparison of three alternative French immersion programs: grades 8 and 9. Instructional Services Department, The Protestant School Board of Greater Montreal, December, 1978.

5. Adiv, E. An analysis of second language performance in an early French immersion program: grades 3, 4 and 5. Instructional Services Department, The Protestant School Board of Greater Montreal, September, 1980.

6. Genesee, F. A comparison of early and late immersion programs. McGill University, October, 1979.

7. Adiv, E. A comparison of second language performance in two alternative French immersion programs. Instructional Services Department, The Protestant School Board of Greater Montreal, January, 1980.

8. Adiv, E. and Walsh, S. Learning French through different core subjects: The effect of linguistic content on second language proficiency. Instructional Services Department, The Protestant School Board of Greater Montreal, September, 1981.

References

Aitken, K.G. Using cloze procedure as an overall language proficiency test. T E S O L Quarterly, 1977, 11, 59-67.

Hunt, K.W. Syntactic maturity in school children and adults. Monographs of the Society for Research in Child Development, 1970, 53, 1.

Larsen-Freeman, D. An ESL index of development. T E S O L Quarterly, 1978, 12, 439-448.

Larsen-Freeman, D. and Strom, V. The construction of a second language acquisition index of development. Language Learning, 1977, 27, 123-134.

Oller, J.W. Discrete point tests versus integrative skills. In J.W. Oller and J.C. Richards (Eds.), Focus on the learner: Pragmatic perspective for the language teacher, Rowley, Mass.: Newbury House, 1973.

Scott, M.S. and Tucker, R.G. Error analysis and English-language strategies of Arab students. Language Learning, 1974, 24, 69-97.

Table 1

(A) Sample Sizes

Total Sample Sizes	Sub-Sample Sizes (Linguistic Analysis)
19	10
"	10
15	9
21	10
23	11
16	9
18	10

(B) Participating Schools

Malcolm Campbell	Riverdale	Mount Royal	Westhill	La Commission Scolaire Jérôme-le-Royer

Table 2

Summary of Results from the Raven's Standard Matrices Test[a]

	Mean	Range
French 422	52.84	48 - 60
French 432	51.04	41 - 57
French 522	52.61	43 - 59
French 532/I	52.62	37 - 58
French 532/II	51.38	32 - 58
French 532/III	52.50	44 - 57
French Control	45.20	28 - 58
F ratio	5.26^{***}	
df	6.141	

*** $p < .001$

[a] maximum score: 60

Table 3

Summary of Results on the Total Score of the
"Test de Lecture Cloze" for the Three French 532 Groups

Pre-Test (Exact Replacements)

	Mean	Range
French 532/I	32.33	19 - 47
French 532/II	31.78	19 - 49
French 532/III	33.69	20 - 53

F ratio 0.27; df 2,59

Post-Test (Exact Replacements)

	Mean	Range
French 532/I	35.89	23 - 46
French 532/II	34.42	17 - 52
French 532/III	34.33	20 - 54

F ratio 0.21 df 2,59

Table 4

Summary of Pre- and Post-test Results for the "Test de lecture Cloze"[a]

	French 532		French 522		French 432		French 422		F ratio pre-post	F ratio course
	Pre-T	Post-T	Pre-T	Post-T	Pre-T	Post-T	Pre-T	Post-T		
Exact Replacements Total (71)[b]	32.80	36.13	25.06	30.19	23.39	28.02	23.30	28.75	42.75***	12.28***
Subtest I (30)	13.59	15.18	8.82	12.15	8.30	11.20	7.80	9.03	54.23***[c]	11.88***
Subtest II (41)	19.21	20.95	16.44	18.04	15.10	16.83	15.67	15.72	10.47**	10.05***
Acceptable Replacement Total (71)	39.29	43.97	31.48	35.55	28.90	33.53	27.67	29.31	34.53***	14.45***
Subtest I (30)	16.08	18.13	11.13	14.47	10.77	13.69	9.08	11.27	62.57***	13.45***
Subtest II (41)	23.24	25.22	20.38	21.11	18.08	19.79	17.79	18.07	8.38**	12.99***

* $p < .05$

** $p < .01$

*** $p < .001$

[a] Means joined by a solid line differ significantly from one another.

[b] Maximum scores in parentheses.

[c] Test X group interaction $F = 2.06^{*}$

Table 5

Summary of Pre- and Post-Test Results for "Test de composition"[a]

	French 532		French 522		French 432		French 422		F ratio Pre - Post	F ratio course
	Pre-T	Post-T	Pre-T	Post-T	Pre-T	Post-T	Pre-T	Post-T		
Global ratings										
Content (5)[b]	3.63	4.05	3.61	3.94	3.56	3.87	3.37	3.65	17.36***	4.70**
Communication (5)	2.90	3.09	2.84	3.04	3.31	3.95	2.78	3.48	156.68***	3.96*
Grammar (5)	3.08	3.60	2.97	3.73	3.20	3.76	2.61	3.47	104.24***	3.49*
Vocabulary (5)	2.94	3.33	2.66	3.16	2.97	3.53	2.43	2.93	59.30***	5.00**
Spelling (5)	2.74	3.04	2.28	2.81	2.58	3.16	2.37	2.73	48.14***	2.67
Linguistic analysis										
Total number of T-units	27.74	22.90	23.66	23.77	31.46	25.60	27.51	20.22	6.75*	0.44
Number of correct T-units	11.63	7.60	7.54	8.21	9.58	6.35	7.63	5.49	6.29*	0.79
Number of words per T-unit	10.61	12.33	11.12	12.74	10.12	10.66	9.32	9.16	2.77	1.87
Number of words per correct T-unit	8.07	8.52	8.26	8.26	7.37	6.99	6.49	6.11	0.01	2.96*

[a] Means joined by a solid line differ significantly from one another.

[b] Maximum ratings possible are indicated in parentheses.

[c] Test X group interaction F = 2.96*

*p < .05
**p < .01
***p < .001

Table 6

Comparison of Post-Test Results and French Control Scores for the "Test de Lecture Cloze"[a]

	French Control	French 532	French 522	French 432	French 422	F ratio
Exact Replacements						
Total (71)[b]	44.64	35.27	29.76	27.38	23.64	18.80***
Sub-test I (30)	19.59	14.83	11.96	10.92	9.04	16.25***
Sub-test II (41)	25.05	20.43	17.80	16.26	15.59	15.42***
Acceptable Replacements						
Total (71)	53.36	43.01	35.13	32.45	29.36	22.50***
Sub-test I (30)	22.04	17.88	14.33	13.35	11.45	18.02***
Sub-test II (41)	31.32	24.64	20.80	19.08	17.90	23.69***

***p < .001

[a]Means joined by a broken line do not differ significantly from one another.

[b]Maximum scores are indicated in parentheses.

Table 7

Comparison of Post-Test Results and French Control Scores for the "Test de composition"[a]

	French control	French 532	French 522	French 432	French 422	F ratio
Global ratings						
Content (5)[b]	4.10	4.06	3.93	3.67	3.46	6.15***
Communication (5)	3.97	3.89	3.93	3.89	3.47	2.72*
Grammar (5)	4.26	3.57	3.73	3.70	3.49	11.18***
Vocabulary (5)	4.13	3.31	3.35	3.48	2.95	9.52***
Spelling (5)	4.04	3.04	2.81	3.10	2.74	9.75***
Linguistic analysis						
Total number of T-units	15.39	22.97	23.87	25.32	20.73	1.10
Number of correct T-units	11.79	7.56	6.21	5.73	5.96	1.01
Number of word per T-unit	11.91	12.34	12.75	10.70	9.12	2.47
Number of words per correct T-unit	11.71	9.39	8.33	6.85	5.98	2.92*

[a] Means joined by a solid line differ significantly from one another.

[b] Maximum ratings possible are indicated in parentheses.

* $p \leq .05$

*** $p \leq .001$

Appendix

Explanation of Analysis of Covariance

Analysis of covariance is a statistical procedure which is similar to the analysis of variance in that it is used to compare the results of two or more groups on a particular test. At the same time, analysis of covariance mathematically reduces the influence that another variable, such as I.Q., might have on the test results. For example, if two hypothetical language groups under investigation differ *a priori* in terms of I.Q., and if it is believed that I.Q., will significantly influence performance on the test being administered (e.g., a reading test), then an analysis of covariance will estimate the significance of the language factor. This mathematical procedure is used when it is difficult or impossible to select groups which are equivalent in I.Q..